

## **REMARKS**

### **Claim Amendments**

Claims 1 and 3-5 are amended herein to clearly recite the subject matter Applicants regard as the invention. New Claims 16-18 have been added herein. Support for the amendments and the new claims can be found throughout the specification and in the claims as originally filed. No new matter has been added.

### **Rejection of Claims 1 and 3-5 Under 35 U.S.C. §102(b)**

Claims 1 and 3-5 are rejected under 35 U.S.C. §102(b) as being anticipated by Cook (US 5,212,295).

Applicants respectfully disagree. In order for a reference to anticipate a claimed invention, every aspect of the claim must be explicitly or inherently taught within the reference. Claims 3-5 have been amended herein to remove 2-O-substituted CpG from the markush group, thereby rendering the rejection moot as it applies to these claims. Applicants will address the rejection as it may apply to new Claims 16-18. Claims 1 and 16-18 have been amended to clearly recite a modified PS oligonucleotide wherein the modification consists of a 2'-O-substituted CpG dinucleotide. Examples of such modified PS oligonucleotides can be found in the specification at Examples 1-4.

Cook generically teaches the preparation of chirally pure backbone-modified antisense oligonucleotides wherein one or more of the nucleotides can possibly have any one of a laundry list of possible modifications. However, Cook does not expressly teach or describe a modified PS oligonucleotide in which the modification consists of a 2'-O-substituted CpG dinucleotide and fails to provide any guidance that would lead to such an oligonucleotide. As such, a rejection of the instant claims over Cook is based solely on the improper use of hindsight in light of the teachings of the instant application and not based on the express or inherent teachings of Cook. Therefore, Cook clearly fails to anticipate instant Claims 1 and 16-17. Reconsideration and withdrawal of the rejection are respectfully requested.

### **Rejection of Claims 1 and 3-5 Under 35 U.S.C. §102(b)**

Claims 1 and 3-5 are rejected under 35 U.S.C. §102(b) as being anticipated by Agrawal (WO 94/01550). Applicants respectfully disagree. Claims 3-5 have been amended herein to

remove 2-O-substituted CpG from the claim, thereby rendering the rejection moot as it applies to these claims. Applicants will address the rejection as it may apply to new Claims 16-18.

In order for a reference to anticipate a claimed invention, every aspect of the claim must be explicitly or inherently taught within the reference. Claims 3-5 have been amended herein to remove 2-O-substituted CpG from the markush group, thereby rendering the rejection moot as it applies to these claims. Applicants will address the rejection as it may apply to new Claims 16-18. Claims 1 and 16-18 have been amended to clearly recite a modified PS oligonucleotide wherein the modification consists of a 2'-O-substituted CpG dinucleotide.

Agrawal fails to teach a modified oligonucleotide wherein the modification consists of a 2'-O-substituted CpG dinucleotide or provide any guidance that would lead to such an oligonucleotide. As such, a rejection of the instant claims over Agrawal is based solely on the improper use of hindsight in light of the teachings of the instant application and not based on the express or inherent teachings of Agrawal. Reconsideration and withdrawal of the rejection are respectfully requested.

#### Rejection of Claim 1 Under 35 U.S.C. §102(b)

Claim 1 is rejected under 35 U.S.C. §102(b) as being anticipated by Kawasaki et al. Specifically, the Office Action states that Kawasaki discloses a 15-nucleotide antisense oligonucleotide comprising a phosphorothioate backbone and a 2'-O-methyl modified CpG.

Applicants respectfully disagree. In order for a reference to anticipate a claimed invention, every aspect of the claim must be explicitly or inherently taught within the reference. Claim 1 has been amended to clearly recite a modified oligonucleotide wherein the modification consists of 2'-O-substituted CpG dinucleotide.

Kawasaki fails to teach a modified oligonucleotide wherein the modification consists of a 2'-O-substituted CpG dinucleotide or provide any guidance that would lead to such an oligonucleotide. As such, a rejection of the instant claims over Kawasaki is based solely on the improper use of hindsight in light of the teachings of the instant application and not based on the express or inherent teachings of Kawasaki. Reconsideration and withdrawal of the rejection are respectfully requested.

#### Rejection of Claims 3-5 Under 35 U.S.C. §103(a)

Claims 3-5 are rejected under 35 U.S.C. §102(b) as being unpatentable over Kawasaki et al. as applied to Claim 1 above, in view of Agrawal et al. and Shillitoe et al. Claims 3-5 have been amended herein to remove 2-O-substituted CpG from the claim, thereby rendering the rejection moot as it applies to these claims. Applicants will address the rejection as it may apply to new Claims 16-18.

As stated above, Kawasaki and Agrawal fail to teach or suggest the claimed invention. Shillitoe fails to provide that which Kawasaki and Agrawal lack. Thus, the instant claims are non-obvious in view of the cited art. Reconsideration and withdrawal of the rejection are respectfully requested.

### **CONCLUSION**

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

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